

FISHERIES

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Transport

5.46 The entire coastline of Kerala is well served by the railways. From Trivandrum to Kayankulam and from Tirur to Manjeswar, a total distance of 220 miles, the tracks are only two to three miles from the sea coast. In addition, there is a motorable road running almost all along the entire coastline. Head loads, bicycles, motor lorries, all these modes are employed for the transportation of fish to the markets depending on the distance of the landing sites from the consuming centres.

5.47 The State Fisheries Department operates four insulated vans. In addition, the Department operates two insulated carrier boats, one from Cochin and the other from Azhikode. These boats transport iced-fish through the inland waters to the interior places. For the marketing of fish in the interior areas, the Indo-Norwegian Project operates eight refrigerated vans.

5.48 It is estimated that the State will require about 60 road vehicles and 20 carrier vessels during the next 10 years. The capital expenditure on these is expected to be about Rs. 40 lakhs, of which Rs. 15 lakhs would be required during the Third Plan. The trucks and carrier vessels should, as far as possible, be owned and operated by Fishermen's Cooperative Societies. Expansion of insulated wagon facilities on the railways will be equally necessary. Insulated wagons should be provided on routes connecting the major production centres with the consumption centres.

Marketing

5.49 The marketing of fish in Kerala is not well organized. At present it is controlled by a few moneylenders and fish merchants. The fishermen are very poor and have generally to depend on borrowings during the off season. A departmental survey reveals that in 1958 the fishermen in Kerala had total assets of only about Rs. 30 lakhs against a total debt of Rs. 135 lakhs. Only a small percentage of the fishermen in Kerala own the boats and nets they use. Most of them work as employees under few boat-owner fishermen. In the pay-off period the boat-owner advances small amounts to the fishermen for their day-to-day needs. The catch is auctioned at the landing centres. The bidders include the fish curers, the retailers and lorry owners, who generally supply fish to the retailers.

5.50 Fish prices fluctuate considerably even in the course of the day. Fish is never weighed in the market. They are measured by standards such as heap, basket, and number, and these vary from market to market. The important wholesale fish markets in the State are located at Trivandrum, Kottayam, Tonur, Trichur, Kozhikode, Alwaye, Changanacherry and Athirumpuzha.

5.51 Changanacherry, Athirumpuzha and Vaniyankulam are the most important markets for cured and salted fish. In the coastal areas the consumption of dried fish is confined mostly to the off-season when fishing totally stops. In the interior of the State, owing to lack of transport facilities, cured fish is sold for the major part of the year. The State has a number of retail fish markets, every town or a group of villages having at least one.

5.52 Fish marketing in Kerala requires a great deal of improvement, both

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VEHICLE DENSITY

	Per mile of road	Per sq. mile	Per 100,000 Population
Kerala	2.14	1.34	146.6
West Bengal	1.20	0.92	111.1
India	1.20	0.32	104.0

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Kerala comes up with the highest indices, but this is not surprising as the railway serves only certain limited areas and road transport has to serve the other areas.

8.19 Trivandrum and Calicut districts have the largest concentration of goods vehicles on the road; Alleppey, Ernakulam, and Quilon figure next. As regards the stage carriages, Trivandrum district has the largest fleet; Trichur, Ernakulam, and Calicut districts also account for large numbers of stage carriages but these are much smaller. The Coimbatore-Cochin route is saturated with goods traffic in cotton bales, fertilizers, planks, tea, tapioca, machinery, hardware, etc., particularly since the opening of the Mangalapuzha bridge replacing the Desom ferry. The traffic was expected to go up by about 50 per cent during 1961. Similarly the traffic between Calicut and Coimbatore, across the Palghat gap and between Calicut and Wynad (timber traffic) bound for destinations in Salem, Madras, Mysore, Tuticorin, etc., has been on the increase. As industrial developments presage considerable increase of traffic on these routes, problems of alignment, bridging, extra lanes, expressway sections, etc., may call for more investment and additional construction.

8.20 About 250 trucks are operating between Mysore and Kerala on inter-State routes. They are subject to the restriction that they may not operate on more than three important straight routes, not exceeding 300 miles in each State. Inter-State routing arrangements between Madras and Kerala are yet to be completed.

8.21 The business in goods transport in the State suffers from the preponderance of owner-operators of single trucks (1,717 operators). There are only five operators in the State who own more than 10 trucks. The predominance of the owner-operator of single trucks is likely to prevent the industry from obtaining the economies and advantages of enhanced efficiency resulting from better organization of road transport in the State. [422]

8.22 Among other features of the transport system special mention may be made of chronic over-loading of vehicles and the beginning of movement in truck-trailer combinations in order to circumvent difficulties arising from restrictions of weight over weak bridges and culverts. Study and analysis of road transport problems are rendered more difficult by the paucity of data regarding traffic, the absence of regular departmental road census of vehicles and traffic, etc. A limited degree of nationalization of goods transport by road has been introduced on the Cochin-Mannar route where 10 to 18 trucks carry tea from the estates to Cochin, and rice, manures and machinery from Cochin to the estates.

8.23 Despite an early start, the nationalized road passenger services have not made much headway. About 458 vehicles are on the road, covering 24.9 million miles annually, and carrying about 65.3 million passengers. The larger revenues resulting from increased traffic and higher fares, have not improved the net profits of [62]

* The revenues rose by Rs. 31 lakhs.

494 the services, which have declined from Rs. 23.8 lakhs in 1956-57 to Rs. 17.4 lakhs
652 in 1959-60.

499 8.24 The allotments during the Second Plan for the construction of roads and
491 bridges were Rs. 2.146 crores and Rs. 1.932 crores respectively. The expenditure on
652 roads and bridges in the first four years of the Plan amounted to Rs. 2.871 crores and
Rs. 1.041 crores. The expenditure on maintenance in the three years 1956-59 was
about Rs. 2.956 crores. The achievement in respect of road construction, improve-
ment and upgrading and construction of major bridges lagged seriously behind
targets in the fourth year of the Second Plan.

8.25 The Central Government's expenditure on the construction and improve-
ment of national highways was as follows:

1958-59	Actual	Rs. 11 lakhs
1959-60	Revised Estimate	Rs. 32 lakhs
1960-61	Budget Estimate	Rs. 35 lakhs

493 8.26 The number of buses and trucks rose sharply in the State during the four
494 years of the Second Plan; but particulars are lacking regarding the amount of public
or private investment on vehicles. The nationalized passenger services planned to
add 460 buses to the fleet, 300 for rehabilitation and new 160 for operating, on
a stretch of 400 miles of roads. If achieved, this would involve an investment of
the order of Rs. 2 crores. Between 1956-57 and 1958-59 the capital at charge rose
by Rs. 78.4 lakhs only.

THE INLAND WATERWAYS

487 8.27 The inland waterways of the State comprise: (a) the west coast canal
system, stretching continuously except for a land-locked break between Azhikkal
and Badagara (29.5 miles) a distance of over 347 miles from Trivandrum to Hosdurg;
(b) cross canals, 387 miles long, mostly in the south of the State serving the commercial
region in the midlands, and about 521 navigable miles in its various rivers. The
Ashtamudi and Vembanad lakes provide extensive navigation facilities for traffic
to and from Alleppey, Kottayam, Quilon and Cochin.

8.28 The waterways present a variety of problems though none of them are
insuperable. These should be tackled systematically as the waterways promise
superior economic advantages. Natural limitations arise from weather and rainfall;
most rivers are navigable upto their middle reaches only during the period of the
monsoons. In many places they are narrow and shallow (e.g., on the Trivandrum-
489 Quilon route). Dredging is often insufficient and even the dredgers are unsuitable
503 for dredging the narrow sections. Tugging services are required in hazardous areas,
e.g., Pathiramanal-Munroe light area in the Vembanad lake. Bridges are often low,
as in Varkala and on the Trivandrum-Quilon route, and they do not permit operation,
particularly of passenger boats. Landing places have not been provided in many
505 places, and where they are, they are not maintained in proper condition for use. A
[605] great drawback of water transport is insecurity and pilferage of the cargo. The

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upon the maintenance of navigability in the waterways, and removal of a number of handicaps listed in para 8.28. 433* 449

CONCLUSIONS

8.47 The conclusions that follow from the general traffic pattern outlined above are (a) accessions to traffic may be expected just in those areas and routes where it is strikingly high already (e.g., Cochin-Shoranur), (b) spare transport capacity on many railway sections will be absorbed, (c) the road, rail and waterway links to the ports may need improvement, and (d) further, the road transport capacity and terminal facilities should be increased to meet mounting demands.¹

8.48 The railways have an important role to play, mainly in inter-State traffic and in helping the work of the ports. In the Third Plan, an investment of Rs. 1.2 crores i.e., of the same order as proposed and accepted but unfulfilled in the Second Plan may be necessary, mainly in connection with increase in the line capacity on vital routes (e.g., Cochin-Shoranur). If traffic and engineering surveys establish the economic feasibility of Trivandrum-Nagercoil-Tirunelveli line, it may be considered for the Fourth Plan. 433* 449

8.49 As the eastern regions of the State are untouched by the Railways and are likely to remain so, these have to rely mainly on road transport. It is necessary to extend, bridge, and improve the road network in these areas till at least 50 per cent of the targets set for 1981 are achieved by 1971². The expenditure will be about Rs. 17 crores in the Third Plan and Rs. 26.3 crores in the Fourth Plan.

8.50 The Third Plan programme for roads and bridges in the State will cover the development of arterial routes and cross-roads in the north of the State (Rs. 4.32 crores), improvement of arterial routes in the south including the opening of Thenmala-Thekkadi road (Rs. 1 crore), the Vypeen Island Scheme (Rs. 1 crore), construction and improvement of about 3,600 miles of district and village roads (Rs. 5.996 crores) and the construction and improvement of 122 major and 584 minor bridges and culverts. Schemes spilling over from the Second Plan and costing Rs. 1.62 crores will also have to be completed. It is desirable to institute a road fund in the State to finance road development. The particular areas and routes where extension and improvements are possible in the next five years are set out in Table 43. The physical targets are indicated in Table 44.³

8.51 The number of trucks will need to be considerably augmented to cope up with the anticipated demands of traffic. The investment on trucks may amount to about Rs. 11 crores in the Third Plan and Rs. 10.29 crores in the Fourth Plan. The number of passenger buses may require to be increased by 2,400 in 10 years. About 4,600 buses may have to be replaced by the end of 1971. This would entail an expenditure of Rs. 20.5 crores. The State's Third Plan envisages the continuance of the 433* 443 444

¹ Passenger traffic is certain to go up with rising population and concentrations of industry and trade at such centres as Trivandrum, Quilon, Kundara, Cochin, Ernakulam, Trichur, Palghat, Calicut and Cannanore but no estimate of the passenger service demands has been made here.

² Targets for 1981 as per formula of the Chief Engineers' Plan, Bombay (1960).

³ [Table 44, appearing on p. 298 of the text, has not been tabulated -- Anzlys F]

* 433 policy of gradual nationalization. In the nationalized sector, about 560 additional
493 vehicles are proposed to be put on the road at a cost of Rs. 2.16 crores. Investment
494 on land, buildings and equipment is to be Rs. 87.7 lakhs. A Road Transport Corporation should be formed to run the bus service. The private sector will have to meet the residual road passenger needs.

* 433 8.52 The recommendations of the Inland Water Transport Committee for the
503 development of the waterways of the State must be implemented since considerable traffic potential can be tapped for this transport medium at low cost. In order not merely to keep pace with but also to be ahead of industrial developments promising traffic, it may be necessary to invest even more than Rs. 2 crores in the Third Plan, as at present proposed. The improvements in navigability of the waterways north of Cochin, of the Cochin-Quilon and Quilon-Trivandrum routes and the cutting of the landlocked Azhikkal-Badagara section, are some of the items in the Third Plan budget for development of inland waterways in the State. Extensions of the waterways south of Trivandrum, and north of Hosdrug upto Mangalore, to connect up with the Mangalore-Coondapur canal works, will have to be taken up later on in the Fourth Plan.

* 433 8.53 The State's current schemes for the development of Neendakara, Quilon
504 and Calicut and the recommendations of the Intermediate Ports Committee have been taken into account in proposing an investment of Rs. 2.42 crores in the Third and Rs. 1.87 crores in the Fourth Plans. On account of anticipated demand for port-services by newly coming up or expanding industries in the State and outside, it would be wiser to provide initially higher investments in transport to keep ahead of the demand for traffic.

8.54 Port of Cochin can be expected to play an even more dominant role in the transport of the State as the economy takes off. An investment of Rs. 1.75 crores proposed to be incurred to improve facilities at Cochin Port during the Third Plan will benefit not merely Kerala but Madras and other States. It will add conspicuously to the State's transport capacity, created by the investments in roads, waterways and railways within the State.

[PP. 139-205 NOT PROCESSED]